1	2	3	4
2.	Rangit St. IV (3x40 MW) in Sikkim by Jal Power Corporation Ltd. **(Private Sector)**	3.06.2007	6.07.2007
3.	Pare (2x55 MW) in Arunachal Pradesh by North Eastern Electric Power Corporation **(Central Sector)**	29.08.2007	24.09.2007

B. Proposals under examination

		Month/Year of Receipt	Status
1.	Kundah in Tamil Nadu 4x125=500MW Tamil Nadu Electricity Board **(State Sector)**	10/06	Under examination
2.	Singoli Bhatwari In Uttarakhand, 3x33=99MW L&T Uttaranchal Hydro Power Ltd. **(Private Sector)**	06/07	Under examination
3.	Gundia, in Karnataka 2x200=400MW Karnataka Power Corporation Ltd. (KPCL) **(State Sector)**	06/07	Under examination
4.	Dibang, Arunachal Pradesh 12x250MW National Hydro Electric Power Corporation **(Central Sector)**	06/07	Under examination

Hydro electric power potential

1412. PROF. P.J. KURIEN:
SHRI LALIT KISHORE CHATURVEDI:

Will the Minister of POWER be pleased to state:

(a) whether any survey has been conducted on the total hydro electric power potential in the country;

(b) if so, the details thereof, State-wise;

(c) the percentage already tapped, State-wise;

(d) whether this exploitation is being done by projects under Government and private sectors, if so, in what quantity it is being done giving the details thereof, State-wise;

(e) the quantity of potential which remains unexploited and the reasons therefor;

(f) whether Government has any action plan to tap the full potential; and

(g) if so, the details thereof?

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE): (a) to (c) Yes, Sir. The reassessment studies of hydro-electric potential of the country, completed by the Central Electricity Authority in 1987, have placed the hydro power potential at 1,48,701 MW in terms of installed capacity.

As on 15.11.2007, 31,439.5 MW (21.14%) of the potential has been tapped and 14,177 MW (9.53%) is under construction. The state-wise details of hydro potential developed, under construction, yet to be developed and percentage thereof in terms of installed capacity are given at Statement-I.

(d) Yes, Sir. The State-wise break-up of potential developed in Central Sector, State Sector and Private Sector is given in Statement-II.

(e) About, 1,03,000 MW of the estimated potential remains untapped. The main reasons for slow pace of development of hydro-electric potential in the country are as under:—

(i) Difficult/inaccessible sites

(ii) Inadequate infrastructural facilities

(iii) Environmental forest and wildlife clearance related problems

(iv) Land acquisition and rehabilitation problems

(v) Adverse geological conditions

(vi) Transmission/Evacuation constraints

(vii) Appointment of project cost among various beneficiaries

(viii) Law and order problems

(ix) Inter State issues.

(f) and (g) The Government of India is committed to the speedy development of hydro power in the country. However, the development of the entire potential will depend on the techno-economic viability of the projects, and the policies of the respective host State Governments to harness this potential.

Statement-I

Status of Hydro Electric Potential Development

(In terms of Installed capacity)

As on 15.11.2007

Region/State	Identified Capacity as per re-assessment study	Capacity Developed		Capacity Under Construction		Capacity Developed +Under Construction		Capacity yet to be developed	
	(MW)	(MW)	(%)	(MW)	(%)	(MW)	(%)	(MW)	(%)
1	2	3	4	5	6	7	8	9	10
Northern									
Jammu & Kashmir	1416	1864.2	13.18	899.0	6.36	2763.2	19.53	11382.9	80.47
Himachal Pradesh	18820	6085.5	32.34	4435.0	23.57	10520.5	55.90	8299.6	44.10
Punjab	971	1297.7	100.00	0.0	0.00	1297.7	133.64	0.0	0.00
Haryana	64	62.4	97.50	0.0	0.00	62.4	97.50	1.6	2.50
Rajasthan	496	430.0	86.69	0.0	0.00	430.0	86.69	66.0	13.31
Uttaranchal	18175	2752.1	15.14	2154.0	11.85	4906.1	26.99	13269.0	73.01
Uttar Pradesh	723	510.2	70.57	0.0	0.00	510.2	70.57	212.8	29.43
Sub Total (NR)	**53395**	**13001.9**	**24.35**	**7488.0**	**14.02**	**20489.9**	**38.37**	**32905.1**	**61.63**
Western									
Madhya Pradesh	2243	2438.5	108.72	400.0	17.83	2838.5	100.00	0.0	0.00
Chhattisgarh	2242	137.0	6.11	0.0	0.00	137.0	6.11	2105.0	93.89
Gujarat	619	555.0	89.66	0.0	0.00	555.0	89.66	64.0	10.34
Maharashtra	3769	2653.3	70.40	0.0	0.00	2653.3	70.40	1115.7	29.60
Goa	55	0.0	0.00	0.0	0.00	0.0	0.00	55.0	100.00
Sub Total (WR)	**8928**	**5783.8**	**64.78**	**400.0**	**4.48**	**6183.8**	**69.26**	**2744.2**	**30.74**

	2	3	4	5	6	7	8	9	10
Southern									
Andhra Pradesh	4424	2017.5	45.60	404.0	9.13	2421.5	54.74	2002.5	45.26
Karnataka	3514	3448.3	52.23	230.0	3.48	3678.3	55.71	2923.7	44.29
Kerala	6602	1838.5	52.32	160.0	4.55	1998.5	56.87	1515.5	43.13
Tamil Nadu	1918	1747.5	91.63	60.0	3.13	1817.5	94.76	100.6	5.24
Sub Total (SR)	**16458**	**9061.8**	**55.06**	**854.0**	**5.19**	**9915.8**	**60.25**	**6542.3**	**39.75**
Eastern									
Jharkhand	753	237.2	31.50	0.0	0.00	237.2	31.50	515.8	68.50
Bihar	70	44.9	64.14	0.0	0.00	44.9	64.14	25.1	35.86
Orissa	2990	1861.5	62.07	150.0	5.00	2011.5	67.07	987.5	32.93
West Bengal	2841	156.5	5.51	292.0	10.28	448.5	15.79	2392.5	84.21
Sikkim	4286	84.0	1.96	2309.0	53.87	2393.0	55.83	1893.0	44.17
Sub Total (ER)	**10949**	**2389.4**	**21.82**	**2751.0**	**25.13**	**5140.4**	**46.95**	**5808.7**	**53.05**
North Eastern									
Meghalaya	2394	185.2	7.74	84.0	3.51	269.2	11.24	2124.8	88.76
Tripura	15	15.0	100.00	0.0	0.00	15.0	100.00	0.0	0.00
Manipur	1784	105.0	5.89	0.0	0.00	105.0	5.89	1679.0	94.11
Assam	680	375.0	55.15	0.0	0.00	375.0	55.15	305.0	44.85
Nagaland	1574	99.0	6.29	0.0	0.00	99.0	6.29	1475.0	93.71
Arunachal Pradesh	50328	423.5	0.84	2600.0	5.17	3023.5	6.01	47304.5	93.99
Mizoram	2196	0.0	0.00	0.0	0.00	0.0	0.00	2196.0	100.00
Sub Total (NER)	**58971**	**1202.7**	**2.04**	**2684.0**	**4.55**	**3886.7**	**6.59**	**55084.3**	**93.41**
All India	***148701***	***31439.5***	**21.14**	**14177.0**	**9.53**	**45616.5**	**30.68**	**103084.5**	**69.32**

SOURCE: CEA

Note 1: In additon to above 4109.6 MW PSS is under operation and another 700 MW is under construction.

Note 2: The above Table does not include schemes below 3 MW upto March, 2003 and thereafter upto 25MW under construction.

Statement-II

The State-wise break up of potential development in Central Sector, State Sector and Private Sector

	State/utility	Name of Sector	No. of Stations	No. of Units	Capacity (MW)
1	2	3	4	5	6
	Haryana				
1.	HPGC	State Sector	4	8	62.40
2.	**Himachal Pradesh**				
	BBMB	Central Sector	3	16	2315.00
	N.H.P.C.	Central Sector	3	9	1038.00
	SJVNJL	Central Sector	1	6	1500.00
	HPSEB	State Sector	11	30	450.45
	Private	Private Sector	2	5	386.00
	Sub Total		**20**	**66**	**5689.45**
3.	**Jammu & Kashmir**				
	J&KSPDC	State Sector	10	30	304.15
	N.H.P.C.	Central Sector	3	13	1560.00
	Sub Total		**13**	**43**	**1864.15**
4.	**Punjab**				
	BBMB	Central Sector	3	12	551.30
	PSEB	State Sector	14	31	1142.35
	Sub Total		**17**	**43**	**1693.65**
5.	**Rajasthan**				
	PRJVUNJ	State Sector	8	22	430.00
6.	**Uttar Pradesh**				
	4 PJVNL	State Sector	6	20	510.20
7.	**Uttrakhand**				
	NHPC	Central Sector	2	7	374.20
	THDC	Central Sector	1	4	1000.00
	UJVNL	State Sector	11	36	977.85
	Private Sector	Private Sector	1	4	400.00
	Sub Total		**15**	**51**	**2752.05**
8.	**Gujarat**				
	GSECL	State Sector	3	10	545.00
	SSNNL	State Sector	2	11	1450.00
	Sub Total		**5**	**21**	**1995.00**
9.	**Madhya Pradesh**				
	NHDC	Central Sector	2	16	1520.00
	NVDA	State Sector	1	2	10.00

1	2	3	4	5	6
	MPGPCL	State Sector	10	25	895.00
	Private	Private Sector	1	2	13.50
	Sub Total		**14**	**45**	**2438.50**
10.	**Chhattisgarh**				
	CSEB	State Sector	3	9	137.00
11.	**Maharashtra**				
	M.S.E.B.	State Sector	23	46	2334.30
	Tata Power Company (Pvt.)	Private Sector	6	17	493.00
	Sub Total		**29**	**63**	**2827.30**
12.	**Andhra Pradesh**				
	APGENCO	State Sector	17	58	3819.35
	Private	Private Sector	1	3	3.75
	Sub Total		**18**	**61**	**3623.10**
13.	**Karnataka**				
	KPCL	State Sector	15	49	3135.40
	VVNL	State Sector	4	23	226.70
	BPCL	Private Sector	6	16	65.60
	Murdeshwar Power Corporation Ltd. (Pvt. Sector)		1	2	11.60
	Energy Development Corporation Ltd. (Pvt. Sector)		1	2	9.00
	Sub Total		**27**	**92**	**3448.30**
14.	**Kerala**				
	KSEB	State Sector	17	57	1805.50
	Carborundum Universal Ltd. (Pvt.)		1	3	12.00
	Indsil Electrosmelts Ltd. (Pvt.)		1	3	21.00
	Sub Total		**19**	**63**	**1838.50**
15.	**Tamil Nadu**				
	TNEB	State Sector	31	76	2157.45
16.	**Bihar**				
	BHPC	State Sector	4	13	44.90
17.	**Jharkhand**				
	D.V.C.	Central Sector	1	2	4.00
	JSEB	State Sector	2	2	130.00
	Total Jharkhand		**3**	**4**	**134.00**
18.	**Orissa**				
	OHPC	State Sector	6	29	1861.50
19.	**Sikkim**				
	NHPC (Central Sector)	Central Sector	1	3	60.00

1	2	3	4	5	6
	E&PD, Sikkim	State Sector	3	8	24.00
	Sub Total		**4**	**11**	**84.00**
20.	**West Bengal**				
	D.V.C.	Central Sector	2	5	143.20
	WBSEB	State Sector	8	22	606.50
	Sub Total		**10**	**27**	**749.70**
21.	**A&N Islands (ER)**	State Sector	1	3	5.25
22.	**Arunachal Pradesh**				
	NEEPCO	Central Sector	1	3	405.00
	DoP, Arunachal Pradesh	Private Sector	4	10	18.50
	Sub Total		**5**	**13**	**423.50**
23.	**Assam**				
	NEEPCO	Central Sector	2	5	225.00
	APGCL	State Sector	1	2	100.00
	Sub Total		**3**	**7**	**325.00**
24.	**Meghalaya**				
	NEEPCO	Central Sector	1	2	50.00
	MeSEB	State Sector	5	14	185.20
	Sub Total		**6**	**16**	**235.20**
25.	**Nagaland**				
	NEEPCO	Central Sector	1	3	75.00
	DoP, Nagaland	State Sector	1	3	24.00
	Sub Total		**2**	**6**	**99.00**
26.	**Manipur**				
	NHPC	Central Sector	1	3	105.00
27.	**Tripura**				
	DoP, Tripura	State Sector	1	3	15.00
	TOTAL ALL INDIA		**275**	**818**	**35549.10**

SOURCE: CEA

NOTE: (1) Station capacity upto 3 MW not included.

Rural electrification programme

1413. SHRI B.S. GNANADESIKAN: Will the Minister of POWER be pleased to state:

(a) whether Government has proposed to make rural electrification programme mandatory for States, manage rural electric distribution through Franchisees;

(b) if so, to what extent this programme would be beneficial for those of the nearly 1.5 lakh villages and 78 million rural households, which are still awaiting for electrification;